



Methane to Markets

The Kindersley Centre, Berkshire

November 29th & 30th 2006



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Department for Environment
Food and Rural Affairs



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AD – a Chinese Perspective

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Why do we develop biogas?

- **Problems and pressure**
China has been confronted with: Population, development of TVE, higher energy demand and lower efficiency utilization.



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Why do we develop biogas?

- **The focus on indoor air pollution control:** more attention to reduce pollution related diseases of eyes and lungs, and improve our living environment and quality of life.



Why do we develop biogas?



- **The need for social and economic sustainable development:** It is closely relevant to poverty alleviation, health, education and gender issues.

Why do we develop biogas?

- **The need for political and state security:** China has signed international conventions such as the Rio Declaration and Climatic Change Protocol and made clear to the international community its commitments and responsibilities to ensure energy security.



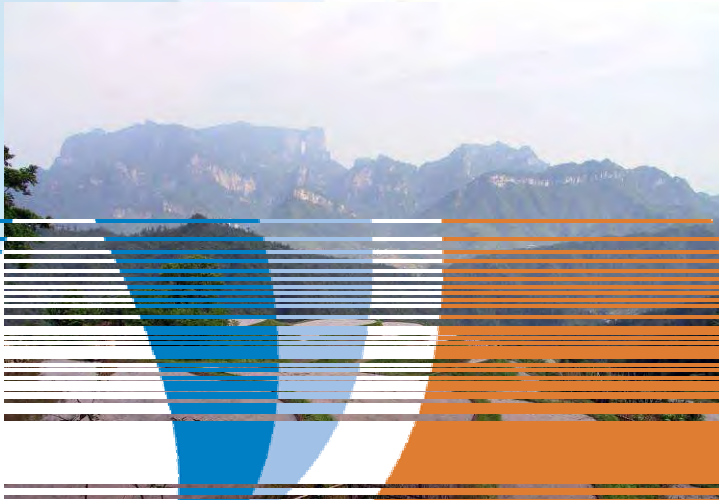
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Why do we develop biogas?

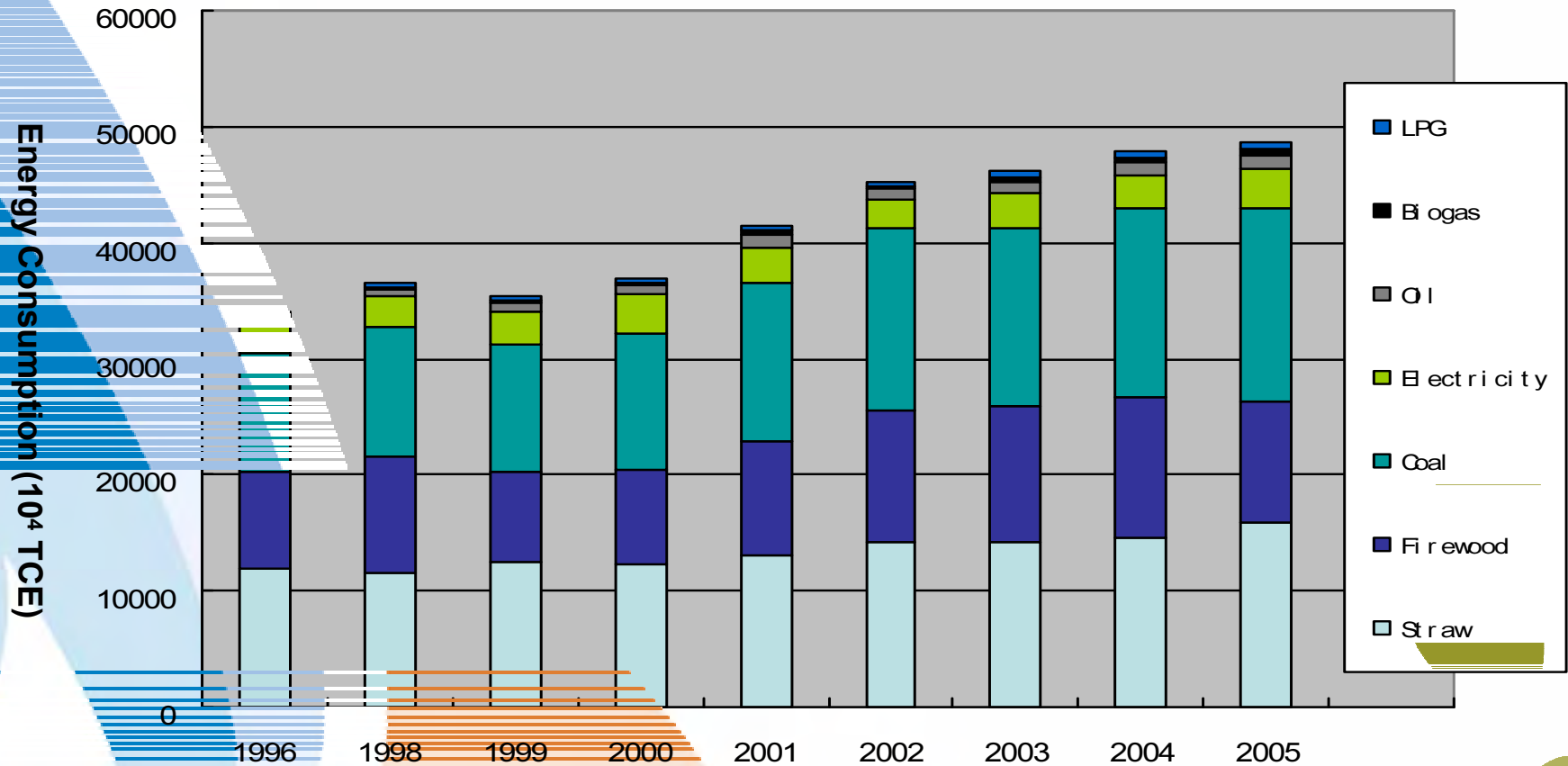


- The function of the **Ministry of Agriculture** is to improve agricultural productivity and to promote the sustainable development of agriculture and the rural economy as well as to increase farmers' real income.


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Why do we develop biogas?



Domestic energy consumption in rural China from 1996 to 2005

How do we practise?



- **Government's Support**

- Each leader of the Chinese central government has had concerns for rural energy development.
- Premier Wen Jiabao said on Feb 19, 2002: "Rural energy development not only provides domestic energy but also contributes to ecological environment protection. It is a significant and meaningful public welfare cause."

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How do we practise?

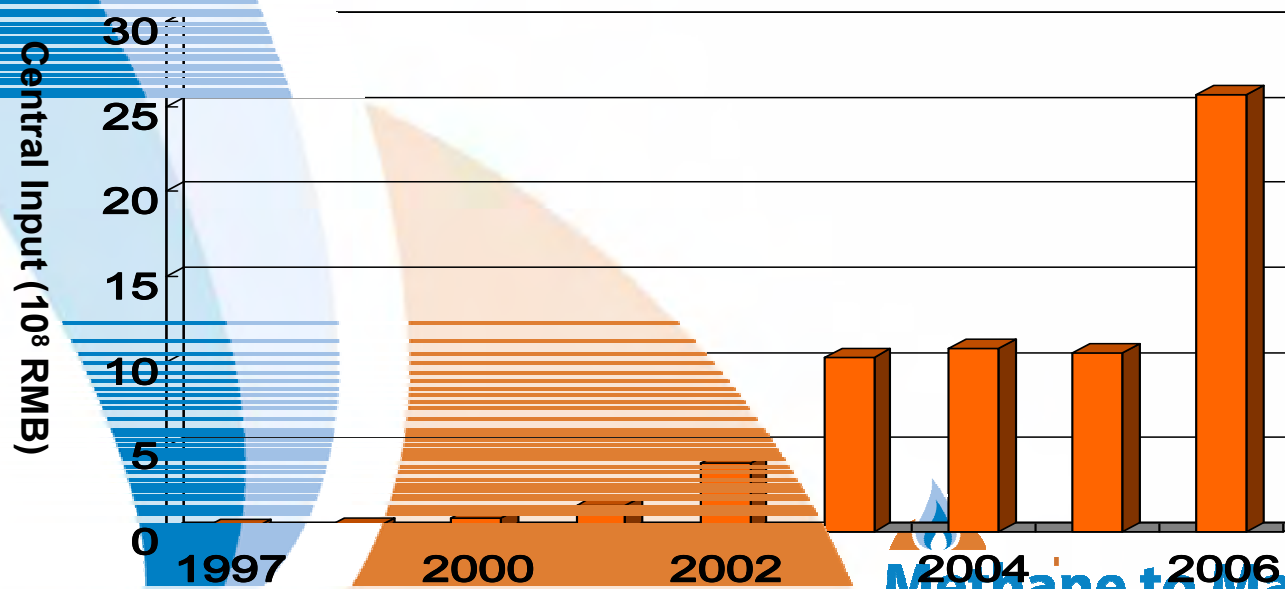
- **Laws and Policies**

- Agricultural Law, 1993;
- China's 21 Century Agenda, 1993;
- Energy Conservation Law, 1997;
- the Fifteenth National Economy Development Plan and Program on Long-term Goals in 2010, 1998;
- Renewable Energy Law, 2005;
- No.1 Document of Central Government from 2004 – 2006;
- Long-term Program on Rural Energy Development prepared by MOA, 2006-2010;
- Some local regulations and legislations.

How do we practise?

- **Investment**

- In total nearly 6 billion RMB (~0.75 billion US\$) has been invested during the past decade;
- About 1 billion RMB (~0.12 billion US\$) has been supported by central government each year since 2003. From 2006, the central investment has been increased to 2.5 billion RMB



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How do we practise?

- **Complete Framework**

- Department of Science, Education and Rural Environment, Ministry of Agriculture is the top of the administration agency;
- 31 provinces (except Taiwan), 1900 counties and 8000 townships have offices or agencies;
- More than 50,000 staffs and 200,000 skilled technicians are working for the rural energy development;
- More and more institutes, universities, associations and enterprises have joined the team. All of them are our partners with good working relationships.

MOA

DSERE

**R&D and
Dissemination**

Management

**Training and
Certification**



**Universities,
Institutes and
Enterprises**

**Office at
provincial
level**

**Office at
county
level**

**Extension
stations at
township level**

**5 Rural Energy
Product Testing and
Certification Centers**

**28 Rural Energy
Working Skill
Appraisal Stations**

**25 Rural Energy
Training Centers**

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How do we practise?

- **Awareness and Education**
 - Training course organization;
 - Education materials preparation;
 - TV, radio and other media performances dissemination.



Conclusions

- As an important part of energy construction, rural energy development has become a major element for China's rural social and economic sustainable development strategy;
- Rural China enjoys rich renewable energy resources and many potential markets and users. It shall make considerable contribution to the global GHG emission reduction;
- Biogas could provide much profit and improve both energy provision and the environment, therefore the biogas development has not only input by farmers or private sectors themselves, but also by governments and the public;

Conclusions

- Biogas development must be combined with economy, social, ecology and health improvements. Otherwise, it will not be developed continuously;
- Maintenance and training are very important issues, it's extremely necessary to establish a service framework;
- China has a long history of biogas development, almost 30 years. Therefore, we would like to give a higher contribution to other developing countries by sharing our experiences, available technologies, products and skilled personnel resources, since there are a lot of similar situations between Asian countries, including social, economic and natural aspects .

Thanks

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